

### Remarks

The following remarks herein are responsive to the Final Office Action mailed on 11/01/05. Claims 1-29 are pending in this application.

Also enclosed is an extension of time for one month and the appropriate fee. Accordingly, claims 1-29 are presented for reconsideration and are believed to be in condition for allowance in light of the remarks infra.

### Discussion of the Office Action

In the Office Action of February 25, 2005, the Examiner rejected claims 1- 4 under 35 U.S.C. §102(b), and he rejected claims 5-7and 9-29 under 35 U.S.C. §103(a).

### Rejection of claims 1-4 under 35 U.S.C. §102(b)

As set forth above, claims **1-4** stand rejected under 35 U.S.C. §102(b) as being anticipated by Boswell et. al (U.S. Patent Publication No. 2002/0003635 A1). The Examiner states, "Boswell discloses an optical element, comprising: a sinusoidal profile substrate (30 of Fig. 2), an adhesion layer, having a predetermined thickness deposited on said profile (20 of Fig. 2), a layer comprising silver, having a predetermined thickness deposited on said layer (18 of Fig. 2); and a passivation layer, having a predetermined thickness deposited on said silver layer (16 of Fig. 2)." Applicants respectfully must traverse such a rejection.

It is well established under MPEP 706.02(a) that for a reference to support a rejection under 35 USC §102, that reference must teach each feature recited in the claims so rejected.

Moreover, the federal circuit has stated that:

“Under 35 U.S.C. §102, anticipation requires that each and every element of the claimed invention be disclosed in the prior art.” *Akzo N.V. v.*

*United States Int’l Trade Comm’n*, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986)

Applicants’ claim 1 is as follows:

An optical element, comprising:

**a non-planar profile substrate,**

**an adhesion layer, having a predetermined thickness deposited on said non-planar profile,**

**a layer comprising silver, having a predetermined thickness deposited on said adhesion layer; and**

**a passivation layer, having a predetermined thickness deposited on said silver layer.**

Applicants respectfully submit that Boswell et al does not disclose nor suggest any of the claim limitations as shown bolded above in Applicants’ original claim 1.

As stated in the Applicants’ response on 8/09/05, **Boswell does not disclose or suggest** anywhere “**a non-planar profile substrate**” as shown in Applicants’ element 1 of claim 1. The Examiner, as set forth above, re-stated that Boswell discloses a sinusoidal profile substrate, as shown by the reference numeral 30 of Fig. 2 in the cited reference. However, reference numeral 30 of Fig. 2 is disclosed by Boswell (see

paragraph [0024]), as “[a] shim having a face 31 with a holographic image or a diffraction grating image embossment 32 formed therein.” Applicants respectfully again submit that **reference numeral 30** (i.e., the shim material) **is an embossing tool** (i.e., a shim and not a substrate) to imprint an image into a composite layer (i.e., (see paragraph [0024], lines 15 -18) “causing the holographic image or diffraction grating image embossment 32 of the shim 30 to emboss a holographic image or diffraction grating image 32A into the layer of wax 20.....”). Such a tool does not stay with the rest of the materials and does not operate as a substrate as shown in Applicants’ claim 1. As one prime example to illustrate Applicants’ point, Boswell (e.g., in the discussion of Fig. 3), states (see paragraph [0025], “[a]s shown in Fig. 3, there is provided a heated roller 34 and an anvil roller 36. The heated roller 34 is shown as **having a shim 38** affixed circumferentially therearound. The **shim 38** is shown as having a plurality of holographic image or diffraction image embossments 40 formed therein.....” Additionally, **the** holographic image or diffraction grating **image embossments 40 of the shim 38 emboss holographic images or diffraction grating images 40A into the layer of wax, layer of metal 18 and second layer of lacquer 16.**”

Again, Applicants submit that the shim of Fig. 3 (i.e., Boswell’s shim of Fig. 2 as cited by the Examiner) **is not a substrate** in any rational argument but is utilized as a tool to emboss an image having predetermined structures such as a diffraction grating.

Applicants have stated (in Applicants response filed 08/09/2005) as well as above that Boswell does disclose a substrate and expressly indicates it as such by (see

paragraph [0024], line 10) reference numeral 22 of Fig. 2 (also see Figs. 1, 3, 4, 5, and 6, reference numeral 22; and Figs. 7, 8, 9, and 10, reference numeral 222). Such a substrate, as indicated by the cited reference numerals in Boswell, is shown as a planar surface and **not** “a nonplanar profile substrate” as claimed by the Applicants of the present invention. Accordingly, Boswell, does not disclose or suggest a non-planar profile substrate as shown in element 1 of Applicants’ claim 1.

As also stated in the response filed 08/09/05, because the shim (i.e., reference numeral 30, of Fig. 2 as cited by the Examiner) is not operating as a substrate as disclosed and claimed in claim 1, it necessarily follows that **Boswell does not disclose or suggest “an adhesion layer....deposited on said non planar profile”** as disclosed by Applicants and as shown in element 2 of claim 1. The Examiner, as set forth above, states that Boswell discloses “an adhesion layer...deposited on said profile ( 20 of Fig. 2).” However, 20 of Fig. 2, is disclosed by Boswell as a wax layer and not an adhesion layer (see paragraph [0024] and for an even more detailed description of the wax layer, see paragraph [0022]. Such a wax layer instead (see paragraph [0024] “functions to prevent any particles of metal from the layer of metal 18 from reaching the face 31 or the holographic image or diffraction grating image embossment 32 formed in the face 31 of the shim 30.”

Boswell does disclose an adhesion layer, (reference numeral 24 of Fig. 2) but such an adhesion layer is not applied to a non-planar profile as claimed by Applicants but instead is applied to a planar profile surface as shown in every figure in Boswell

and as disclosed throughout Boswell (e.g., again see paragraph [0024]). Thus element 2 of Applicants claim 1 is also not disclosed or suggested by Boswell as stated by the Examiner.

**As also stated in the response filed 08/09/05**, it necessarily follows that the silver and passivation layer limitations as disclosed and claimed by Applicants, as shown in claim 1 above, are also not disclosed or suggested by Boswell.

The Examiner also states that "It is noted that the method of deposition is not germane to the issue of patentability of the device itself. Therefore, the method has not been given patentable weight." Applicants respectfully traverse such a statement with regards to the present invention of claim 1 because deposited as shown in each elements 2-4 of claim 1 is positively reciting a structural limitation that is required to occur (See in *Re Collier*, 397 F. 2d 1003, 158 USPQ 266 (C.C.P.A. 1968)). Applicants do not use the gerund form as in a method but instead use "deposited" to provide a structural relationship between respective layers. Accordingly, Applicants disagree with the Examiner in his assessment of the limitations shown in such elements because such limitations do provide patentable weight..

Accordingly, because Boswell does not teach each feature or disclose each and every element as mandated under MPEP 706.02(a) and *Akzo*, as shown above, the rejection of claim 1 and dependent claims 2-4, which contain all the limitations of claim 1, under 35 U.S.C. §102(b), is deemed improper and should be withdrawn.

**Rejection of claims 5-7 and 9-29 under 35 U.S.C. §103(a)**

As set forth above, claims 5-7 and 9-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Boswell et. al. (U.S. Patent Publication No. 2002/0003635 A1). Applicants must traverse such a rejection.

Under MPEP §2143.03:

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” *In re Royka*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974). Applicant respectfully traverses such a rejection.

Regarding claims 5-7, such claims depend upon base claim 1 and thus contain each and every limitation in claim 1 in addition to their own limitations. Applicants submit that in light of the above arguments regarding the rejection of claim 1 under 35 U.S.C. §102(b), an obviousness rejection of such claims is not warranted as mandated under MPEP §2143.03 because Boswell does not teach or suggest the limitations of claim 1 from which the rejected claims depend from.

In addition:

Under MPEP §2143.01, “If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious.” *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Accordingly, because claim 1 is deemed nonobvious in light of the discussion regarding the rejection of claim 1 under 35 U.S.C. §102(b), the rejection of dependent claims 5-7 are also deemed improper under MPEP §2143.01 and should be removed.

Regarding the rejection of independent claim 9 and dependent claims 10-22, which depend from claim 9 and thus contain all the limitations of claims 9; element 1 of claim 9 in particular, comprises "a diffraction grating" and element 2 of claim 9 comprises "an adhesion layer," is deposited on "said diffraction grating." Boswell, as similarly discussed above, does not disclose or suggest such limitations anywhere within the four corners of the cited reference. As stated above, Boswell, see paragraph [0024], discloses a shim (i.e., reference numeral 30) for embossing an image of a diffraction grating but Boswell does not disclose or suggest having a diffraction grating with novel deposition layers deposited thereon.

Accordingly, in light of the above, the rejection of independent claim 9 and dependent claims 10-22, which depend from claim 9 and thus contain all the limitations of claim 9, are deemed improper and is requested to be removed.

Regarding method claims 23-29; independent claim 23 is as follows:

A method, comprising:

**providing a non-planar profile substrate,**

**depositing an adhesion layer** having a predetermined thickness on said non-planar profile, wherein said adhesion layer comprises at least one material selected from the group consisting of: nickel, nickel nitride, chromium, chromium nitride, nickel-chromium alloys, silicon-nitride, and nickel-chromium nitride,

**depositing a layer of silver** having a predetermined thickness on said adhesion layer; and

**depositing a passivation layer** having a predetermined thickness on **said silver layer**, wherein said passivation layer comprises at least one material selected from the group consisting of: nickel, nickel nitride, chromium, chromium nitride, nickel-chromium alloys, silicon-nitride, and nickel-chromium nitride.

Applicants respectfully submit that similar to the discussion above for the rejection of claim 1 under 35 U.S.C. §102(b), Boswell also does not disclose or suggest anywhere the bolded limitations as shown above in Applicants' method claim 23.

Accordingly, because Boswell does not disclose or suggest any of the claim limitations as mandated under MPEP §2143.03, an obviousness rejection under 35 U.S.C. §103(a) is not warranted and the rejection of claim 23 is requested to be removed.

Regarding claims **24-29**, such claims such dependent claims either directly depend from base claims 23:

As stated above, Under MPEP §2143.03:

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974). Applicant respectfully traverses such a rejection.

In addition:

Under MPEP §2143.01, "If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).



Accordingly, in light of the above arguments regarding the rejection of claim 23 under 35 U.S.C. §103(a), the rejection of claims **24-29** is also deemed improper, as mandated under MPEP §2143.03 and MPEP §2143.01, and is requested to be removed.

#### Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claim 8 depends from claim 1, which stands rejected under 35 U.S.C. 102(b).

In light of arguments as set forth above with respect to the rejection of claim 1, Applicants respectfully submit that the objection to claim 8, which depends from claim 1 and thus contains all the limitations of claim 1, has been overcome and therefore has not been rewritten or amended.

#### Conclusion

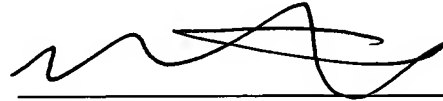
Based on arguments as discussed above, the rejections as given by the Examiner in the Final Office Action mailed 11/01/05 is believed overcome and Applicants respectfully request allowance of the pending claims. Thus, this application is deemed to be in condition for allowance based on claims **1-29**.

The undersigned also respectfully understands that the present response is filed beyond the two month period to prompt an advisory action by the Examiner but Applicants respectfully request such an action nonetheless. However, if prompt

allowance of these claims can be clarified with a telephone conference, he is respectfully requested to initiate the same with the undersigned at (925) 422-3682.

Respectfully submitted,

Dated: 2/3/06

A handwritten signature in black ink, appearing to read 'Michael C. Staggs', written over a horizontal line.

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